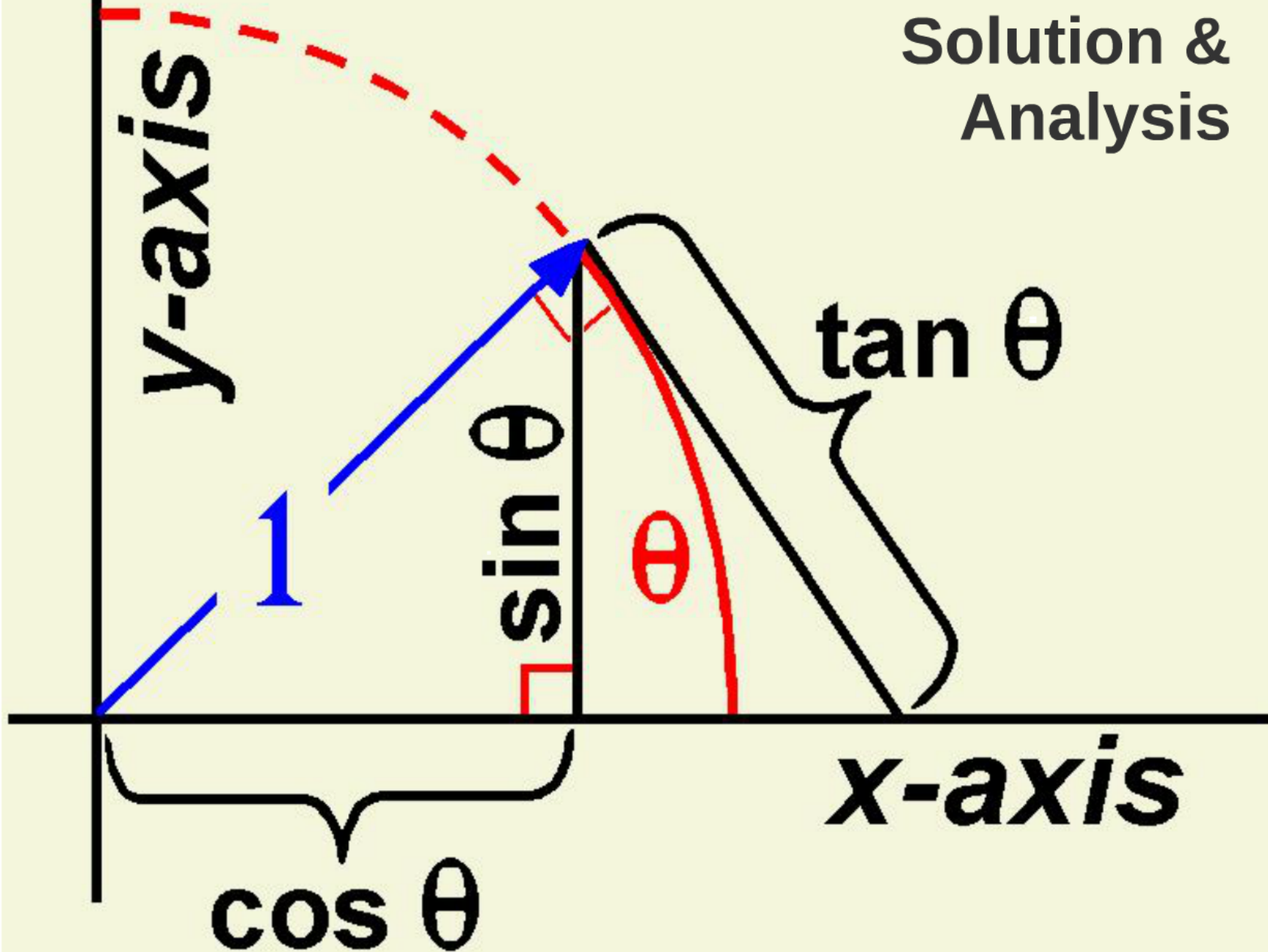
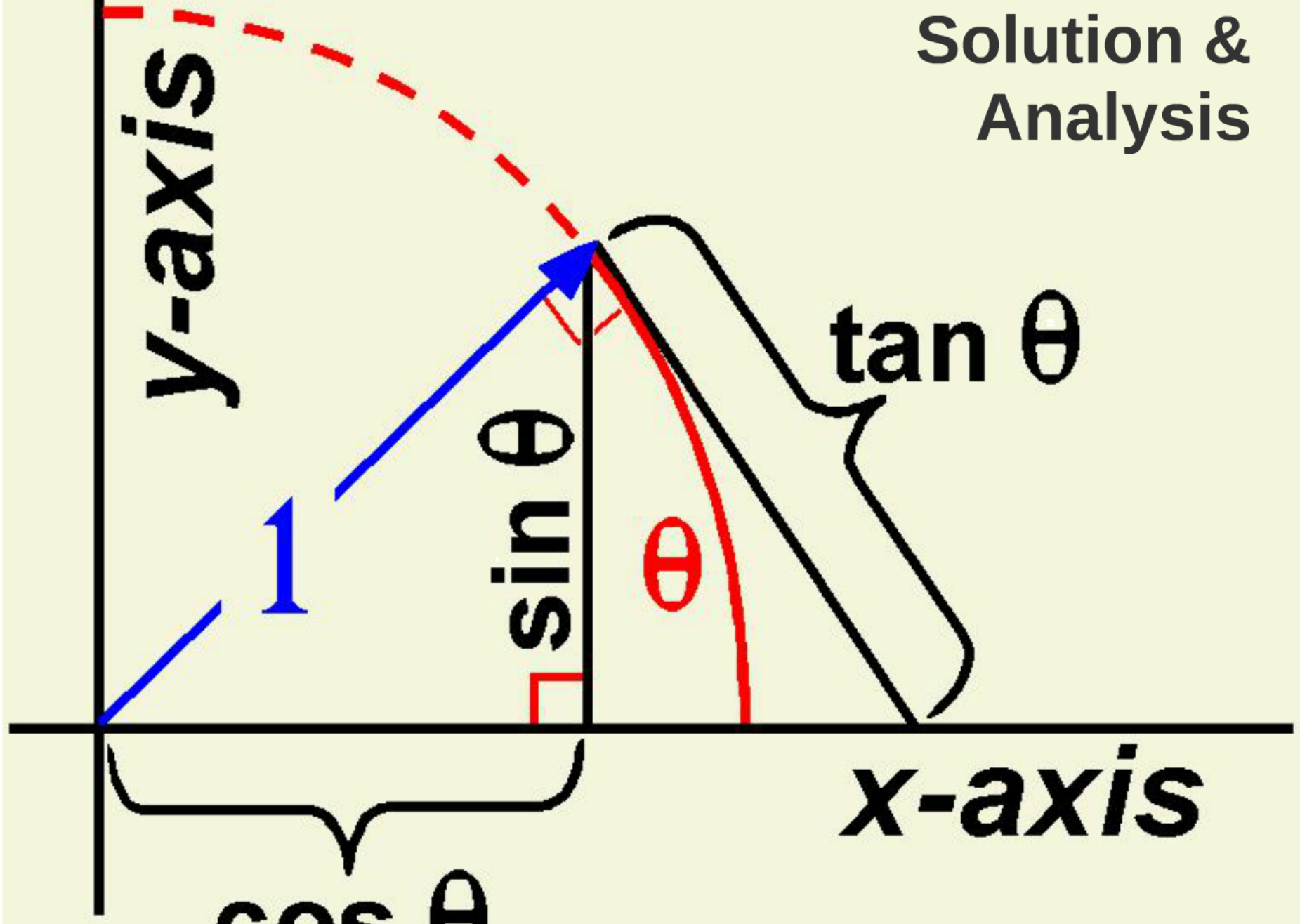


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# **Derivadas de las funciones Trigonométricas Inversas**



# Sen y Csc

$$Y = f(U) = (\text{Sen}^{-1}U)'$$
$$U = g(x)$$

$$(\text{Sen}^{-1}U)' = \left[ \frac{1}{\sqrt{1-U^2}} \right] * U' = \frac{U'}{\sqrt{1-U^2}}$$

$$Y = f(U) = (\text{Csc}^{-1}U)'$$
$$U = g(x)$$

$$(\text{Csc}^{-1}U)' = - \left[ \frac{1}{U * \sqrt{U^2 - 1}} \right] * U' = - \left[ \frac{U'}{U * \sqrt{U^2 - 1}} \right]$$

# Cos U y Sec U

$$Y = f(U) = (\text{Cos}^{-1}U)'$$
$$U = g(x)$$

$$(\text{Cos}^{-1}U)' = - \left[ \frac{1}{\sqrt{1-U^2}} \right] * U' = - \frac{U'}{\sqrt{1-U^2}}$$

$$Y = f(U) = (\text{Sec}^{-1}U)'$$
$$U = g(x)$$

$$(\text{Sec}^{-1}U)' = \left[ \frac{1}{U * \sqrt{U^2-1}} \right] * U' = \left[ \frac{U'}{U * \sqrt{U^2-1}} \right]$$

## Tan y Cot

$$Y = f(U) = (\text{Tan}^{-1}U)'$$
$$U = g(x)$$

$$(\text{Tan}^{-1}U)' = \left[ \frac{1}{1+U^2} \right] * U' = \frac{U'}{1+U^2}$$

$$Y = f(U) = (\text{Cot}^{-1}U)'$$
$$U = g(x)$$

$$(\text{Cot}^{-1}U)' = - \left[ \frac{1}{1+U^2} \right] * U' = - \frac{U'}{1+U^2}$$

# Ejemplos